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# Commonwealth of Massachusetts Joint Labor-Management Committee for Municipal Police and Fire

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In the 1960s in the United States there was a widespread blooming of interest by public employees in labor organizations, in transforming professional and fraternal associations into groups that behaved like unions, and in developing collective bargaining processes where civil service and political and legislative enactments had previously exclusively determined the terms and conditions of employment in government. Local, state and federal governments stimulated and at the same time accommodated to the new era of growth in collective bargaining that continued into the 1970s. Today, two-thirds of federal civilian employees and half of state and local government employees are governed by collective agreements, far higher percentages on the average than in the private sector.

**Background**

In Massachusetts, effective in 1966, machinery was established to make determinations of units of public employees appropriate for collective bargaining, and the duty to bargain with certified groups was placed upon public managements. Disputes over the terms of collective bargaining agreements could be carried through mediation and fact-finding with recommendations, but there was no procedure requiring arbitration or other steps for final resolution, although the use of the strike or lockout was prohibited.

The quest for steps to achieve a final resolution of disputes over the terms of collective agreements led to legislation, effective July 1, 1974, providing for last-best-offer arbitration after fact-finding with recommendations for police and firefighter units in cities and towns of the Commonwealth. This form of final and binding arbitration requires the arbitrator to choose between the package of final proposals made by the union and that made by the city or town. Subsequently, the arbitrator could also elect the package of recommendations made by the fact-finder. The arbitrator could not, as in conventional arbitration, elect a position in between the parties on any of the several issues. The theory of the last-best-offer approach is that each of the parties will be compelled to come closer together, and perhaps reach agreement, in order to avoid a win by the other side. The arbitrator is required to choose the side of one party or of the other. There is accordingly always a winner and a loser unless the parties submit the identical final offer.

In the course of the first three years that the last-best-offer arbitration procedures were in effect, 1974-1977, the management organizations for the cities and towns became convinced, whether warranted or not, that the process was adverse to their interests and favored the police and fire unions. The management associations sought major revisions or repeal of the last-best-offer arbitration provisions. The legislature, nonetheless, voted in June 1977 to extend the statute for another two years, and Governor Dukakis vetoed the bill. The legislature voted, however, to pass the bill over his veto before July 1, 1977. The cities and towns, unwilling to give up the political fight against final and binding arbitration, decided to go out for a referendum to get the signatures to place the issue on the ballot for the 1978 state election.

There had been some unsuccessful attempts by representatives of the cities and towns and the professional firefighters union in joint discussions to compromise the issues during the course of the legislative fight. In the last week of August 1977, while the signatures for the referendum petition were being gathered, representatives of the two sides visited Professor John T. Dunlop to seek his assistance in resolving the controversy. The prospects of continued political conflict seemed to concern both the cities and towns and the fire and police unions.

In the course of a few sessions, including both joint candid discussions and separate meetings, full accord was reached shortly after Labor Day, 1977 on the text of a written agreement between Demitrios Moschos and Kenneth Shaw representing the cities and towns and J.J. Jennings, Martin E. Pierce and T. Dustin Alward representing the Firefighters. Major state-wide police organizations were kept advised of developments by the firefighter representatives. The agreement was rewritten in legislative form by the two sides, cleared with the Governor and legislative leaders and quickly enacted into law without serious opposition. The Governor signed the bill November 15, 1977. The Joint Labor Management Committee for Police and Fire was to begin handling cases on January 1, 1978. All sides seemed relieved to put behind them the intense and bitter political conflict of the preceding months.

There are approximatey 165 local labor organizations representing 11,700 firefighters and 252 local labor organizations representing 12,200 police officers in the Commonwealth.

**The Major Features of the Compact**

1. The management side was opposed to final and binding arbitration and its last-best-offer form on the grounds that this prescribed last step, by its certainty, truncated and

stultified genuine mediation and collective bargaining in many cases. Negotiations and mediation too often became a perfunctory step added to the long drawn-out process of fact-finding and then arbitration. The management representatives had no persuasive alternative to final and binding arbitration since they did not favor resort to a strike or lockout, in the event of a genuine impasse in which collective bargaining and mediation were fully exhausted. The unions were in favor of more effective negotiations and mediation, although they insisted on retaining some form of final and binding arbitration since they opposed resort to economic strife, which they were convinced would turn public opinion against the unions, almost without regard to the merits of the contract dispute. The union and management representatives both recognized that arbitration served as a means of requiring cities and towns to fund the terms of collective agreements, whether voluntarily agreed upon or imposed by an arbitrator, and that arbitration provided a way to deal with recalcitrant parties, although court challenges often made the process excessively lengthy and expensive.

The common ground was to enhance the role of genuine collective bargaining and imaginative mediation so that final and binding arbitration, except in an agreed-upon settlement expressed as an arbitration award for the convenience of both sides, would be rare and be used only in the event of a genuine impasse. The way to achieve a greater role for collective bargaining and mediation, in the view of Professor Dunlop, was to involve experienced representatives of the state organizations of management representatives and of police and firefighters in the negotiation, mediation, and arbitration processes involving individual cities and towns.

Practical settlement and accommodation should be pressed at each stage; the parties themselves, or their statewide representatives, would have a greater and more responsible role and would bring a wider perspective and greater experience to a dispute. The role of lawyers and arbitrators and the frequent litigious quality of their proceedings would be reduced; the settlement process could be materially speeded up and the expenses of the settlement process materially reduced. Settlements would be more practical and better shaped to the interests and needs of the parties. Designing the forms of third-party intervention to suit the problem and the parties would be more conducive to practical accommodation than the single last-best-offer arbitration which requires an overt winner and loser according to whether the arbitrator picks the proposal of one side or the other.

2. The representatives of the cities and towns were concerned to enhance the capacity of municipal managers to manage effectively police and fire departments. They had long sought to legislatively eliminate from bargaining units the job classifications held by officers immediately below the rank of police and fire chiefs. But there were few, if any, cities and towns where such officers could honestly be said to exercise significant managerial functions. The issue was resolved in the mediation sessions leading up to the new statute by an understanding that should any city or town develop a significant actual managerial role for such an officer, after a hearing, that officer could be eliminated from the bargaining unit on the showing that significant managerial functions were performed.

3. The representatives of the cities and towns and these public safety unions recognized that collective bargaining in the decade ahead faced complex and difficult issues and that an attitude and relationship of greater constructive discourse and cooperation would be helpful to all parties and to the Commonwealth generally. The Joint Committee was envisaged as a forum around which such discussions could be held. Some issues were larger, such as the common interest in questions regarding the civil service system, the quality and neutrality of appointments to labor relations posts in the Commonwealth, changes in police and fire departments to improve productivity and constrain costs in an era of tax-caps, and concern with costs of governmental services.

**Structure and Operations of the Joint Committee**

The legislation, based on the compact, created a 12-member joint committee comprising six management members, three from the firefighters and three from the police labor organizations and an impartial chairman. The management and labor members were to be nominated by the respective organizations, and the impartial chairman was to be agreed upon and nominated by the other committee members jointly. The Governor was required to appoint to the Joint Committee these specific nominees. Unlike other state agencies, the Governor and the political process were precluded from discretion in the appointment of the members of the Joint Committee. The management representatives have been drawn from the various management elements in municipal government to be representative of all groups: mayors, city managers, finance committees, boards of selectmen, personnel boards, etc.

These arrangements were designed to enhance the responsibilities of the parties for the work of the Joint Committee, to provide access to the complex structure of municipal government by peers and thereby to encourage effective mediation and settlement. It is difficult to exaggerate the advantages in mediation and dispute resolution, as compared to the role of a solo neutral, that are provided by a team including experienced management and labor representatives who can relate well to the parties in the particular town or city in a dispute over the terms of a collective bargaining agreement. There are numerous operating questions, for instance, on which a neutral has little background. Local political factors and personalities often play a major role in local management and in fire and police locals. The roles of lawyers vary greatly. Representatives of labor and management can elicit information and real positions and counsel modification of views often more effectively than an outside neutral. They are most helpful in the complex internal political features of municipal government and labor organizations which are so decisive in municipal collective bargaining.

The Committee permits the coordination of dispute resolution as between fire and police collective agreements in the same community and among contiguous localities in a way that was not possible under the pre-1978 arrangements where each case was largely a separate entity and comparative conditions were argued before separate fact finders and last-best-offer arbitrators. The whipsaw between fire and police negotiations can be substantially mitigated. The statute reflecting the agreement of September 1977 states that "the Committee shall have oversight responsibility for all collective bargaining negotiations involving municipal police and firefighters."

The Committee has (in the summer, 1980) a full-time staff of two senior representatives, one from management and one from labor, three other mediators, and administrative and research or data-collecting support. Originally the Committee was authorized to intervene in a dispute at any stage; the most recent legislation, in June 1979 extending the life of the Committee for four more years to June 30, 1983, provided that all fire and police disputes over the terms of collective bargaining agreements should be referred initially for thirty days to the Committee. Thereafter the dispute is to be remanded to the State Board of Conciliation and Arbitration, although the Committee is subsequently free to reassert jurisdiction over a dispute at any stage. Under the chairmanship of Paul McCarthy at the Board, the Committee has enjoyed a close and cooperative working relationship.

The Committee initially assigns a staff mediator to a dispute brought to the Committee by one or by both parties to a fire or police collective bargaining relationship. The staff gathers the facts of the dispute, identifies and seeks to

narrow the issues and engages in mediation. The dispute may then involve mediation by the senior staff representatives, and at a later stage may involve labor and management members of the Committee. Firefighter members only are involved in firefighter contracts, and police members only participate in police contract disputes. If unresolved, a case may involve a sub-committee with the chairman or vice-chairman (Professor Morris A. Horowitz of Northeastern University) for further mediation. The Committee may then refer the dispute to a form of final and binding arbitration, certifying the issues in dispute before the chairman or vice-chairman or to an outside arbitrator. The tools available to the Committee at an earlier stage also include fact-finding or a formal mediator's proposal. Thus, the Committee envisages a wide range of devices for settlement adapted to the particular dispute and parties in contrast to the single form of fact-finding and last-best-offer arbitration mandated by legislation to the Board. With a single, certain procedure too many cases tended to go through to the end of the line—last-best-offer arbitration and various court challenges. The Committee uses a wide range of methods to induce direct settlement, an award incorporating their agreement, or an award agreed upon by the labor and management members of the Committee handling the case, or an award by an outside arbitrator who in "med-arb" should also have sought to achieve an agreed-upon settlement, to take the form of an arbitration award.

The attached two tables present information for the period 1975-79 on the operation of the procedures prior to the establishment of the Joint Committee and information on the operations under the Joint Committee. Before the establishment of the Joint Committee there were 97 last-best-offer awards and since the establishment of the Joint Committee there have been 7.

Cases which went the entire last-best-offer route required 15.2 months for resolution compared to the 6.8 months for cases using formal procedures before the Joint Committee. The over-all average time for all cases under the old procedures was 6.7 months compared to an over-all average of 3.6 months under the Joint Committee.

## Overview of Police and Fire Impasse Activity Under G.L. Ch 1078, Acts of 1973 Fiscal Year 1975-79

* Labor organizations representing both police and fire departments are entered in both the police and fire headings.

**A. Stage of Settlement**

| | *Total # of Impasses* | *Settled Prior To Appt. of Factfinder* | *Settled Prior to Factfinder Report* | *Settled Upon Issuance of Fctfndg Report* | *Settled After Fctfndg Report* | *Settled By LBO Award* |
|---|---|---|---|---|---|---|
| **Fire:** | 274 | 101 | 35 | 52 | 30 | 56 |
| **Police:** | 381 | 145 | 86 | 71 | 30 | 48 |
| **Aggregate:** | 648 | 245 | 118 | 121 | 60 | 104 |

**B. Average Settlement Time (Months)**

| | *Pre-Factfinding Report* | *Factfinding Report* | *Post-Factfinding Report* | *LBO Award* | *Overall* |
|---|---|---|---|---|---|
| **Fire:** | 3.31 | 8.81 | 9.24 | 15.17 | 7.41 |
| **Police:** | 3.04 | 8.48 | 8.95 | 15.32 | 6.07 |
| **Aggregate:** | 3.18 | 8.79 | 9.10 | 15.24 | 6.69 |

## Overview of Joint Labor-Management Committee

**Case Activity**

| *Date* | *# of Cases* | *Informal Settlement* | *Formal Settlement* | *LBO Award* | *Pending Cases* |
|---|---|---|---|---|---|
| 9/30/78 | 28 | 10<br>35.7% | 4<br>14.3% | 1<br>3.6% | 13<br>46.4% |
| 1/31/79 | 80 | 30<br>37.5% | 11<br>13.75% | 1<br>1.25% | 38<br>47.5% |
| 5/31/79 | 91 | 44<br>48.4% | 18<br>19.8% | 3<br>3.3% | 26<br>28.6% |
| 9/30/79 | 124 | 54<br>43.5% | 24<br>19.4% | 5<br>4% | 41<br>33.1% |
| 12/31/79 | 136 | 62<br>45.5% | 28<br>20.6% | 5<br>3.7% | 41<br>30.1% |
| 3/31/80 | 160 | 73<br>45.6% | 36<br>22.5% | 5<br>3.1% | 46<br>28.75% |
| 6/30/80 | 200 | 95<br>47.5% | 41<br>20.5% | 5<br>2.5% | 59<br>29.5% |
| 9/1/80 | 221 | 111<br>50.2% | 45<br>20.4% | 7<br>3.2% | 58<br>26.2% |

**Average Settlement Time (Months) as of 9/1/80**

a. Pursuant to G.L. Ch 150e, Acts of 1977:

| *Informal* | *Formal* | *Overall* |
|---|---|---|
| 4.54<br>n = 59 | 7.85<br>n = 39 | 5.85<br>n = 98 |

b. Pursuant to G.L. Ch 154, Acts of 1979:

| *Informal With Jurisdiction* | *Informal Without Jurisdiction* | *Informal Removed from BCA* | *Informal Referred to BCA* | *Formal JLMC Only* | *Formal Removed from BCA* | *Overall* |
|---|---|---|---|---|---|---|
| 3.57<br>n = 22 | 1.73<br>n = 17 | 3.29<br>n = 10 | 2.90<br>n = 3 | 6.78<br>n = 8 | 6.59<br>n = 5 | 3.63<br>n = 65 |

# Changes in the Legal Regulation of Small Businesses

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This article does not attempt to discuss all the ways in which small businesses are, or could be, specially regulated. It is confined to a few problems that fall under partnership and corporation law. In particular, it examines adjustments of rights among creditors of the firm and among partners, shareholders and directors. Special attention is directed to the role of the family in business and the significant financial relationships that grow between small firms and more powerful businesses with which they trade.[1]

**Limitations of Present Law**

Business ownership offers the tantalizing prospect of money, property and status. Ownership is also attractive for those who dislike working for others and/or fear becoming lost in a large organization, desire to be their own boss, aspire to build a family business (ownership later being passed on to the children), and hold a conviction that one can produce better products or services than do existing firms.[2] Individuals or small groups often create firms because they are determined to found them rather than because it makes economic sense. This resolve often leads to difficulties with creditors and with management of the firm.

Accompanying the creation of such firms are problems involving creditors and management that customary state corporation laws can not suitably remedy. Corporation law presupposes a demarcation between ownership and management and requires complex rules for decision making. By contrast, partnership law presupposes a few owners, who manage with a comparatively simple system of decision making. Even so, in the face of some well known disadvantages including the expense and work involved in forming a corporation and in complying with statutory report and disclosure duties, founders of many small businesses are attracted to the corporate form of organization rather than to the sole proprietorship or partnership. The attractions include the prospect of limited liability, and, to a lesser extent, the unlimited life of the firm, flexible ownership transfer, and various tax considerations. Overlooked may be the possibility that corporation law may be unsuitable for a small business's relationships with its creditors and for relationships between its shareholders' directors and other participants.

Many small businesses are "close corporations" without public participation in ownership through the stock market. The shareholders are few and may be limited to members of a family. The corporation statutes of only a few states (Massachusetts being one) provide any modification of law to meet the special needs and problems of close corporations.[3] If exceptions exist, courts most often create them, sometimes by the importation of partnership concepts or analogies.

**Creditors**

Many small firms see the local bank as the beginning and the end of institutional finance. Indeed, a significant minority relies on external loans for a high proportion of its total finance, a practice restrained only by the lender's fear of mismanagement leading to business failure. This fear motivates bankers to recommend greater equity funding,[4] but entrepreneurs fear losing control to outside investors. The same fear blinds the truth that it is better to own less than all of a going concern than all of a business in bankruptcy. In any event, some control may be lost if the lender is astute enough to insist that, in addition to security for the loan,owners must provide adequate assurances of proper management. Sometimes the lender's lack of confidence in proper management motivates his or her active participation. Hence, the lender may advise, command, make policy decisions, and informally choose directors and managers. In the meantime, the lender can easily circumvent the founder's limited liability by obtaining the personal guarantees of loans from directors and shareholders.

So far as creditors perform risk-bearing and managerial functions, they are, in fact, the true entrepreneurs in not a few small companies. They are real participants in the partnership or in the close corporation with the shareholders. In addition to managerial domination of a small business, the secured creditor has many of the rights associated with ownership—power of sale, claim on proceeds and influence over use of assets. However, only in the context of fraud has it been seriously suggested that large-scale creditors might be liable to other creditors because of their managerial participation in small debtor firms.

To go further might seriously threaten small business finance, and yet, there are times when it might be desirable. Trade creditors supply stock-in-trade, raw materials and other essential goods and services for day-to-day operations. Generous trade credit is one means of making the small customer dependent upon its large supplier. Unlike interventions by an institutional lender into the affairs of a small firm, the supplier may be "moving in" to absorb the firm into its own organization. Because some trade creditors do participate in the management of smaller businesses, the former are at least *de facto* a part of those firms.

The rights and liabilities of a dominant trade creditor participating in management compared with those of other creditors need consideration. As a separate entity, the dominant firm is not saddled with the liabilities of the small business. It has the right to enforce its security interest in collateralized assets, and,therefore, has many of the rights associated with ownership mentioned above in the discussion of loan creditors. But in insolvency proceedings precipitated by inadequate or pernicious management participation by a dominant trade creditor, should it be made responsible for the small firm's other business debts? Should it be treated similarly to a shareholder, when the corporate veil is pierced, or perhaps as a partner? One answer is to make it in some way a *de jure* part of the firm, something it may have been, all along, attempting to become.

By whatever legal device, as a *de jure* or *de facto* part of the firm, fiduciary duties could be imposed on dominating trade creditors as they are imposed on partners, directors and officers. Furthermore, it has been suggested that, if the business becomes insolvent, such a creditor should be relegated to the bottom of the list of priorities or even face liability (as with shareholders and directors) in response to fraudulent trading, or inadequate capitalization.[5]

**Deadlocks and Squeeze-outs**

There are a number of times in the growth of a small firm when its structure is likely to generate conflict among owners and managers. When a few people jointly manage a business and own it in approximately equal shares, corporation law seems incongruously complex. Something like partnership law would better apply to the situation when two or more who have operated a business as co-equals can no longer maintain equality or mutual trust. One founder may perceive a once necessary co-entrepreneur now to be a drag on the business and, hence, try to rid the business of the detriment. Or, an offspring who has worked hard for the firm

and who in due course has earned ownership and management rights may resent and dispute the founder's continued dominance. Or, owners and managers who do not belong to the firm's dominant family may be thwarted by nepotism in their aspirations to attain top management positions. These conflicts may lead to deadlocks or attempts to squeeze-out others from management or ownership.

When prescribed rights and procedures including voting power can aid no faction to achieve its aims, a deadlock exists. Squeeze-outs are attempts to expel a minority faction from a position of management or ownership. In a partnership, an aggrieved partner's legal protection is virtually guaranteed, although the choice of remedy is limited. A dissolution and accounting of assets and profits is the standard remedy; yet, others are available. Conceivably a partnership agreement could provide for expulsion of partners who fail to devote sufficient time to the business or who engage in a competing business as a squeeze-out tactic. The expelled partner would be paid off according to the agreement, while being enjoined from further competition including an order to surrender the profits gleaned from the competing business.

In a corporate situation dividends may not be declared, or remuneration of directors and officers may be excessive. The disadvantaged minority shareholder is hemmed in by the principle of majority rule and the difficulty of proving the directors' bad faith. A breakdown of personal relations, or mutual trust and confidence usually follows. This result should be enough to treat a small corporation more like a partnership.[6] For example, the situation could justify a winding-up, even when the company is a prosperous concern. The same treatment could be accorded in a squeeze-out case.

Anticipation of deadlocks and squeeze-outs could foster planning that provides structures and mechanisms for avoidance or resolution acceptable not only to the owners and managers but also to the courts. There are clear limitations to this tactic. Many small entrepreneurs will not want to spend the time or money at the time of incorporation. Further, under changed circumstances, entrenched rights can become a nuisance to everybody.

Although there are many proposed legal solutions that contend in detail with deadlocks and squeeze-outs,[7] limitation of space requires the proposal of a broadly generalized approach to change in the law. Without now defining "small business," the distinction between incorporated and unincorporated small businesses could be eliminated and replaced by a single small business legal structure combining, so far as possible, the best features of present-day partnership, general corporation and close corporation law. For example, corporate law could contribute the principle of the separate legal entity, perpetual life and easy transfer of ownership. Partnership law could contribute easy registration procedures, a simplified business constitution, simplified duties of good faith, rights to participate in management without being expelled by a majority of fellow partners, and the requirement that no partner be involved in a business competing with that of the partnership. Further, there could be one taxation system.

**Conclusion**

Only a few small business areas needing special treatment have been examined. There are many more. Perhaps the best that could happen, given the great importance of healthy small businesses to the economy of the Commonwealth of Massachusetts, is that a special commission be empaneled to study the matter and to report its findings and recommendations to the business community and then to the legislature.

**End Notes**

1. This article is drawn in substantial measure from M. Chesterman, *Small Business* (Sweet and Maxwell, London, U.K., 1977).
2. D. Collins and D. Moore, *The Enterprising Man* (Michigan State U., E. Lansing, Mi., 1964); N. Smith, *The Entrepreneur and His Firm* (Michigan State U., E. Lansing, Mi., 1967).
3. A. Wolfe and F. Naffziger, *Legal Perspectives of American Business Associations* (Grid, Inc., Columbus, Ohio, 1977) p. 308.
4. H. R. Hartzler, "New England Needs Venture Capital" *Massachusetts Bus. and Econ. R.*, Vol. 7, No. 2 (Fall, 1979) p. 2.
5. Chesterman, pp. 251-2.
6. For a good example see Galler v. Galler, 32 Ill 2d 16, 203 N. E. 2d 577 (S. Ct. Ill., 1964).
7. Chesterman, pp. 161-199, 246-258.

# The October 1980 Massachusetts Economic Policy Analysis (MEPA) Model Forecast

by George Treyz and Roy Williams*

Employment declines in Massachusetts manufacturing in the second and third quarters of 1980 were particularly noticeable in the nondurables sectors where third quarter seasonally adjusted employment is expected to be down five percent from the first quarter. The durable goods sectors were hit by the national recession but the average decline was small because of two special factors. First, our representation in automobile-related sectors is much below the national average. Moreover, our auto production is in small cars, which have fared relatively well recently. Second, Massachusetts' production of office machinery, computers, and electronic components has offset declines in other durable goods industries.

Total employment in Massachusetts in the third quarter also benefited from an increase in service employment associated with the celebration of Boston's 350th birthday. On balance, then, Massachusetts' unemployment rate held at about six percent in the third quarter up from five percent in the first quarter but about the same as in the second quarter.

The MEPA model continues to predict some increase in the unemployment rate with levels between six and seven percent in the next two quarters. This would be due to some

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Massachusetts
business and economic report

# OCTOBER CONTROL FORECAST

## SUMMARY REPORT
## MASSACHUSETTS ECONOMIC POLICY ANALYSIS MODEL
## (Seasonally Adjusted Annual Rates)

| | 1979 | 1980 | 1981 | 1980:3 | 1980:4 | 1981:1 | 1981:2 | 1981:3 | 1981:4 | 1982:1 |
|---|---|---|---|---|---|---|---|---|---|---|
| Employment—Nonag. W. & S. † | 2603 | 2657 | 2681 | 2657 | 2640 | 2654 | 2673 | 2689 | 2709 | 2730 |
| % Change | 3.1 | 2.1 | .9 | -.2 | -2.5 | 2.1 | 2.9 | 2.3 | 3.1 | 3.0 |
| Manufacturing Employment † | 674 | 668 | 664 | 658 | 656 | 659 | 662 | 665 | 670 | 673 |
| % Change | 3.4 | -1.0 | -.5 | -8.7 | -1.3 | 1.7 | 2.0 | 1.8 | 2.5 | 2.1 |
| Non-Manufacturing Employment † | 1928 | 1989 | 2017 | 1999 | 1984 | 1995 | 2011 | 2023 | 2040 | 2056 |
| % Change | 2.9 | 3.1 | 1.4 | 2.9 | -2.9 | 2.2 | 3.2 | 2.5 | 3.2 | 3.3 |
| Unemployment Rate | 5.5 | 5.9 | 6.5 | 5.8 | 6.7 | 6.6 | 6.4 | 6.5 | 6.4 | 6.3 |
| Rate of Wage Change | 7.9 | 8.5 | 10.5 | 8.1 | 10.3 | 10.5 | 10.7 | 10.9 | 10.8 | 10.1 |
| Wage Index Re. to U.S.* | 94.3 | 94.0 | 94.6 | 94.2 | 94.4 | 94.4 | 94.6 | 94.7 | 94.8 | 94.9 |
| Avg. Weekly Hours in Mfg. | 40.4 | 40.0 | 40.3 | 39.8 | 40.0 | 40.2 | 40.3 | 40.3 | 40.3 | 40.4 |
| Rate of Price Inflation | 10.3 | 12.7 | 10.2 | 8.2 | 11.4 | 10.5 | 9.6 | 9.8 | 10.6 | 10.4 |
| Relative to U.S. CPI* | 96.6 | 96.0 | 96.2 | 95.9 | 96.1 | 96.1 | 96.1 | 96.2 | 96.3 | 96.3 |
| Personal Income (mil$) | 51019 | 57204 | 64018 | 58032 | 59359 | 60930 | 62862 | 65036 | 67243 | 69305 |
| % Change | 11.5 | 12.1 | 11.9 | 12.3 | 9.5 | 11.0 | 13.3 | 14.6 | 14.3 | 12.8 |
| Disposable Income (mil$) | 42581 | 47660 | 53392 | 48404 | 49380 | 50589 | 52099 | 54566 | 56315 | 57951 |
| % Change | 10.1 | 11.9 | 12.0 | 13.5 | 8.3 | 10.2 | 12.5 | 20.3 | 13.4 | 12.1 |
| Real Per Cap. D.I. Index* | 106.4 | 105.4 | 106.2 | 105.9 | 105.0 | 104.7 | 105.1 | 107.3 | 107.7 | 107.9 |
| Relative to U.S.* | 101.1 | 104.0 | 104.2 | 104.6 | 103.8 | 104.0 | 104.2 | 104.3 | 104.4 | 104.3 |
| Rel. Business Cost Index* | 96.6 | 96.5 | 96.8 | 96.6 | 96.7 | 96.7 | 96.8 | 96.9 | 96.9 | 96.9 |
| Manufacturing* | 96.5 | 96.3 | 96.6 | 96.4 | 96.4 | 96.4 | 96.5 | 96.6 | 96.6 | 96.7 |
| Non-Manufacturing* | 96.7 | 96.6 | 96.9 | 96.7 | 96.8 | 96.8 | 96.9 | 97.0 | 97.1 | 97.1 |

*Indexes equal 100 in calendar 1973.
† Thousands of persons

continued declines in the equipment investment component of the national economy and to some reduction in the temporary beneficial effect of Jubilee 350 in Boston.

The question of whether or not Massachusetts has become recession-proof has been coming up recently. Our judgment is that it has not become so. Many recessions are associated with large drops in capital investment, which could effect Massachusetts more than other states. In fact, even in this recession these effects will linger in Massachusetts as curtailed capital investment continues after automobile production and residential construction recover. Rather than becoming recession-proof, Massachusetts may in fact become more susceptible to another type of instability: the high technology sector of the economy can fluctuate severely due to shifts in technology and to rapid swings in federal defense spending. While underlying growth may mask the effects of these fluctuations over the short or even intermediate run, such shifts may present a problem for Massachusetts in the more distant future.

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